October 7, 2003

Mr. Keith Kanipe
MSW
P.O. Box 279
Noblesville, IN 46061-0279

RE: Exempt Construction and Operation Status
E097-18103-00509

Dear Mr. Kanipe:

The application from MSW, received on September 3, 2003, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following, to be located at 8258 Zionsville Road, Indianapolis, Indiana 46268, is classified as exempt from air pollution permit requirements.

The source consists of the following process/equipment:

(a) Welding operations, using copper-based wire and nickel-based wire, with maximum capacity of 498 tons per year.

(b) Natural gas combustion equipment (space heaters), with total maximum heat input capacity of 6,100 Btu/hr.

(c) Aqueous parts washing operation consisting of two (2) wash tanks with 1,180 gallons and 590 gallons capacity, and one (1) rinse tank with 600 gallons capacity. In washing tanks ES-9600 5% solution will be used, containing no VOC or HAPs; in rinsing tanks a 1-2% water solution of rust inhibitor ES-5601LF will be used; ES-5601LF contains less than 8% by weight of VOC (glycol ethers).

(d) 275-gallon above ground storage tank for storing used oil.

(e) Three (3) abrasive blasting machines with built-in dust collectors and air flow, respectively, 1000, 1000, and 780 actual cubic feet per minute. Manufacturer guaranteed PM emission rate is no more than 0.01 grain per dry standard cubic foot.

Notwithstanding this exemption, this new source will be subject to the following state and local rules.

Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:

(a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), the PM emissions from welding operation shall not exceed the pound per hour emission rate established as E in the following formula:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

The combined process weight rate for the welding operation is 498 ton/yr of wire, or 0.0568 ton/hr. Therefore, pursuant to 326 IAC 6-3-2(e), the allowable emissions rate for the welding operation is 0.600 pounds per hour.

Pursuant to 326 IAC 8-3-1(b)(1)(A), this new Aqueous Parts Washing Operation is subject to requirements of 326 IAC 8-3-5 (Cold cleaner degreaser operation and control). The owner or operator of a cold cleaning facility shall:

(c) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(a) the solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF));

(b) the solvent is agitated; or

(c) the solvent is heated.

(d) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(e) Equip the degreaser with a freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater, if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)).

(f) Provide a permanent, conspicuous label which lists the operating requirements outlined below.

(g) The owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:

(a) Close the cover whenever articles are not being handled in the degreaser.

(b) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(c) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

This exemption is the first air approval issued to this source. The source may operate according to 326 IAC 2-1.1-3.

If the source proposes to construct new emission units, modify existing emission units or operations, or otherwise modify the source, an application or notification shall be submitted in accordance with 326 IAC 2 to the Indianapolis Office of Environmental Services (OES). If you have any questions, please feel free to contact Mr. Boris Gorlin at 317-327-2280.

Sincerely,

Original Signed by John B. Chavez
John B. Chavez
Administrator

cc: file
Mindy Hahn, IDEM - OAQ
Matt Mosier - Air Compliance

BG

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
AND
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES

Technical Support Document (TSD) for Exempted Units

Source Background and Description

Source Name:	MSW
Source Location:	8258 Zionsville Road, Indianapolis, IN 46268
County:	Marion
SIC Code:	3714 (Motor Vehicle Parts and Accessories)
Exemption #:	097-18103-00509
Permit Reviewer:	Boris Gorlin

The Environmental Resources Management Division (ERMD) has reviewed a request from MSW relating to the construction and operation of a new auto transmission repair and restoration plant.

The source will consist of the following emission units:

(a) Welding operations, using copper-based wire and nickel-based wire, with maximum capacity of 498 tons per year.

(b) Natural gas combustion equipment (space heaters), with total maximum heat input capacity of 6,100 Btu/hr.

(c) Aqueous parts washing operation consisting of two (2) wash tanks with 1,180 gallons and 590 gallons capacity, and one (1) rinse tank with 600 gallons capacity. In washing tanks ES-9600 5% solution will be used, containing no VOC or HAPs; in the rinsing tank a 1-2% water solution of rust inhibitor ES-5601LF will be used; ES-5601LF contains less than 8% by weight of VOC (glycol ethers).

(d) 275-gallon above ground storage tank used to store used oil.

(e) Three (3) abrasive blasting machines with built-in dust collectors and air flow, respectively, 1000, 1000, and 780 actual cubic feet per minute. Manufacturer guaranteed PM emission rate is no more than 0.01 grain per dry standard cubic foot.

Enforcement Issues

No enforcement action is pending.

Recommendation

The staff recommends to the Administrator that an exemption from air pollution permit requirements be approved for the proposed new construction. This recommendation is based on the following facts and conditions:

Information, unless otherwise stated, used in this review was derived from the source's letter received

on September 3, 2003.

Emissions Calculations

See Appendix A (Emissions Calculation Spreadsheets) for detailed calculations (2 pages).

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	1.909
PM-10	1.909
SO_2	0.000
VOC	0.425
CO	0.0022
NO_x	0.0027

HAP's	Potential To Emit (tons/year)
Metal (Nickel)	0.766
Glycol Ethers	0.361
TOTAL	1.127

The potential emissions are less than the levels specified in 326 IAC 2-1.1-3 (Exemptions). Therefore, this source is classified as exempt from air pollution permit requirements.

Federal Rule Applicability

There are no New Source Performance Standards 40 CFR Part 60 or NESHAP 40 CFR Part 63 applicable to this source.

NESHAP 40 CFR Part 63, Subpart T (National Emission Standards for halogenated Solvent Cleaning) is not applicable because no halogenated HAP solvents (as defined in 40 CFR Part 63, §63.460(a)), are used in the aqueous parts washing operation.

State Rule Applicability

326 IAC 5-1 (Opacity Limitations)

This source is located in Marion County. Therefore, pursuant to 326 IAC 5-1-2 (Opacity limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

326 IAC 2-1.1-3 (Exemptions)

(a) Pursuant to 326 IAC 2-1.1-3(e)(10)(E)(iv), the welding operation using copper-based wire (no HAPs emissions) is exempt from air permit requirements.

(b) Pursuant to 326 IAC 2-1.1-3(e)(1)(H), the welding operation using nickel-based wire is exempt from air permit requirements because HAP (nickel) emission is less than 1 ton per year.

(c) Pursuant to 326 IAC 2-1.1-3(e)(5)(A)(i), natural gas combustion equipment is exempt from air permit requirements because its total heat input capacity is less than 10,000,000 Btu/hr.

(d) Aqueous parts washing operation uses aqueous solutions containing less than 1% by weight of VOC, and HAP (glycol ethers) emissions is less than 1 (one) ton per year; therefore, pursuant to 326 IAC 2-1.1-3(e)(13)(D) and 326 IAC 2-1.1-3(e)(1)(H), aqueous parts washing operation is exempt from air permit requirements.

(e) Pursuant to 326 IAC 2-1.1-3(e)(7)(B), the 275-gallon above ground storage tank is exempt from air permit requirements as a vessel storing lubricating/machining oils.

(f) Pursuant to 326 IAC 2-1.1-3(e)(26)((D), three (3) abrasive blasting machines with design grain loading of less than or equal to three-hundredths (0.03) grain per actual cubic foot and air flow rates less than 4,000 actual cubic feet per minute are exempt from air permit requirements.

326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)

(a) Pursuant to 326 IAC 6-3-2(e), the PM emissions from welding operation shall not exceed the pound per hour emission rate established as E in the following formula:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

The combined process weight rate for the welding operation is 498 ton/yr of wire, or 0.0568 ton/hr. Therefore, pursuant to 326 IAC 6-3-2(e), the allowable emissions rate for the welding operation is 0.600 pounds per hour. Potential PM emission is 0.227 lb/hr. Therefore, this source will be in compliance with this rule.

(b) Pursuant to 326 IAC 6-3-1(b)(14), the abrasive blasting machines are not subject to this rule because their PM potential emissions are less than five hundred fifty-one thousandths (0.551) pound per hour.

326 IAC 8-3 (Organic Solvent Degreasing Operations)

Pursuant to 326 IAC 8-3-1(b)(1)(A), this new Aqueous Parts Washing Operation is subject to requirements of 326 IAC 8-3-5 (Cold cleaner degreaser operation and control). The owner or operator of a cold cleaning facility shall:

(a) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(1) the solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF));

(2) the solvent is agitated; or

(3) the solvent is heated.

(b) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(c) Equip the degreaser with a freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater, if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)).

(d) Provide a permanent, conspicuous label which lists the operating requirements outlined below.

(e) The owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:

(1) Close the cover whenever articles are not being handled in the degreaser.

(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

Conclusion

The construction of this auto transmission repair and restoration plant to be exempted from air pollution control permit requirements.

Appendix A: Emissions Calculations

Company Name: **MSW**

Address City IN Zip: **8258 Zionsville Road, Indianapolis, IN 46268**

Exemption: **097-18103-00509**

Reviewer: **Boris Gorlin**

MSW - Potential Emissions

Emission Unit	Maximum Capacity (Tons/Year)	Emission Factor	Emission Factor (lb/ton)	Source of Emission Factor	Potential Emissions PM (Tons/Year)	PM10 (Tons/Year)	SOx (Tons/Year)	NOx (Tons/Year)	VOC (Tons/Year)	CO (Tons/Year)	HAPS (Tons/Year)
Natural Gas Combustion Sources	0.01	PM	1.9	AP-42	0.0001	0.0002	0.0000	0.0027	0.0001	0.0022	0.0000
1-02-006-03	(mmBTU/hr)	PM10	7.6	AP-42							
	total	SOx	0.6	AP-42							
		NOx	100	AP-42							
		VOC	5.5	AP-42							
		CO	84	AP-42							
Abrasive Blast Machines	1000	PM	0.01	Manufacturer	0.3285	0.3285	0.0000	0.0000	0.0000	0.0000	0.0000
3-09-002-05	acfm	PM10	grains per	Data							
	1000		acfm		0.3285	0.3285	0.0000	0.0000	0.0000	0.0000	0.0000
	acfm										
	780				0.2562	0.2562	0.0000	0.0000	0.0000	0.0000	0.0000
	acfm										
Above Ground Storage Tank	275	VOC		TANKS 4.0	0.0000	0.0000	0.0000	0.0000	0.0632	0.0000	0.0000
4-07-999-98 Used oil storage	gallons										
Welding operations	498	PM	2	AP-42	0.9960	0.9960	0.0000	0.0000	0.0000	0.0000	0.7665
3-09-052-80	ton/yr	PM10	per 1000 lbs	12.19-1							
Aqueous Parts Washing	4.5171108	VOC	8%	Mass balance	0.0000	0.0000	0.0000	0.0000	0.3614	0.0000	0.3614
3-09-888-01		(as glycol ethers)									
TOTAL					1.9093	1.9094	0.0000	0.0027	0.4247	0.0022	1.1279

Abrasive Blasting			Aqueous Parts Washing VOC Emissions:	0.3614	ton/yr
6 IAC 6-3-4(14); 2,780 acfm; 0.551 lb/hr	0.023123501	gr/acfm		1.980	lb/day
2,780 acfm; 0.03 gr/acf	0.7149	lb/hr			
2,780 acfm; 0.01 gr/acf	0.2383	lb/hr			

Welding Operation PM Emission Limit			
Emission Factor:	2	lb/1000 lb or wire	
Max. wire usage:	498	ton/yr wire	
or:	0.0568	ton/hr wire	
PM Pot. Emission:	**0.996**	ton/yr PM	
or:	**0.227**	**lb/hr PM**	
326 IAC 6-3-2(e) allowable PM emission:			
E = 4.10 P^0.67 =	4.1 x 0.0568^0.67 =	**0.600**	**lb/hr PM**

Appendix A:	**Emissions Calculations**						
Company Name:	**MSW**						
Address City IN Zip:	**8258 Zionsville Road, Indianapolis, IN 46268**						
Exemption:	**097-18103-00509**						
Reviewer:	**Boris Gorlin**						
Aqueous parts washing							
Tank 1 (5% ES5601LF)	1180	gallons					
Tank 2 (5% ES5601LF)	590	gallons					
Tank 3 (ES9600, no VOC)	600	gallons					
Tanks are dumped every 30-60 days.							
ES9600 contains no VOCs							
Tank 3 contains 1-2% of ES9600							
ES5601LF contains less than 8% VOC (glycol ethers)							
Tanks 1 and 2 contain 5% of ES5601LF	(**VOC** content less than **0.4%**)						
Tanks 1 and 2 (totals)							
Gallons	Gallons	Lbs	Lbs VOC	Lbs VOC	Lbs VOC	Tons VOC	
water	additive	additive		per year	per day	per year	
1770	88.5	752.9	60.23	722.7	**1.980**	**0.361**	
Welding Operations							
Maximum number of parts per 8 hour shift							
42	parts						
Time spent welding each part							
11.43	minutes/part						
Maximum welding wire usage							
52	inches/minute						
Maximum weight of wire per inch							
0.583	oz/inch						
Maximum application rate per part							
21.66	pounds per part						
Maximum usage per year							
498.0	tons/year	**2,729**	lb/day (365 day/yr)				
Actual usage per year							
118.2	tons/year	**648**	lb/day (365 day/yr)				